CHAPTER 8C

METAL AND WOOD WINDOWS

8C-01. SUBMITTALS

a. Shop Drawings

- (1) Check for specifics on each different type window, as:
- (a) Thickness and dimensions
- (b) Weather stripping
- (c) Hardware
- (d) Finish/factory priming
- (e) Fasteners, anchorage and their compatibility with adjoining materials.
- $\left(2\right)$. Check for the window schedule and compare it with the schedule on the drawings.
- (3) Calculations for anchorage of environmental control windows.

b. <u>Certificates/Labels</u>

- (1) Certified test reports on air and water infiltration thermal conductivity, condensation resistance and load tests must be provided for environmental control windows.
- $(2)\,$ An Architectural Aluminum Manufacturing Association (AAMA) quality certification label on aluminum windows and storm windows may replace the certificate.
- (3) Performance certification labels on wood windows indicate they must comply with ANSI A200.1 provisions and requirements. Do they?

8C-02. MATERIALS

a. <u>Screens</u>

- $\ensuremath{(1)}$ Check steel screens against Steel Window Institute (SWI) specifications.
- (2) Check aluminum screens against ANSI A134.1 requirements.
- (3) Look for screens on buildings which don*t have combination storm—screen units.

b. Storm Windows

- (1) Must comply with provisions and requirements of ANSI A134 .3.
 - (2) Check for vertical or horizontal sliding operation.
- (3) Is factory painted finish as specified or is aluminum mill finish?

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- $\left(4\right)$ Check for separation or isolation between steel prime windows and aluminum storm windows.
- (5) Check for compatible fasteners. Those fasteners exposed must be aluminum or non-magnetic stainless steel.

c. Metal Prime Windows

- (1) Aluminum
- (a) Must comply with ANSI A134.1.
- (b) Check for certificate on minimum condensation factor when double glazed. See AAMA 1502.6 for this requirement.
- (c) Check A-A2 of Al34.1 for awning windows. Awning windows are hinged at the top.
- (d) For basement windows and other fixed windows check $\ensuremath{\text{P-A2}}\xspace$.
 - (e) Check C-A2 for casement windows.
 - (f) Check DH-A2 for double and single-hung type.
 - (g) Horizontal-sliding windows refer to HS-A2.
- (h) Projected windows are similar to awning windows but have a different specification, P-A2. All sash or projected windows do not open as with awning type.
 - (i) Check TH-A2 for top-hinged windows.
 - (j) Vertically-pivoted windows refer to VP-A2.
- $\mbox{\ensuremath{(k)}}$ Check window finish for factory painted or anodized treatment. Check anodizing for quality and color.
- $\hspace{0.1in}$ (1) Temporary protective coating on aluminum must nut be used on surfaces to receive sealants.
 - (2) Steel
- (a) Check SWI specification for all types; including basement, casement, projected, classroom, security windows and others.
- (b) Check for protective finish; either factory prime coat of paint on steel or over hot-galvanized steel.

d. Wood Prime Windows

- $\left(1\right)$ Check ANSI A200.1 for general and specific requirements.
- (2) Windows will usually be single or double-hung type, although awning, casement or horizontal-sliding type may be specified.
- (3) Wood windows shall be factory primed for finish painting.

 $\left(4\right)$ Check for extra hardware such as sash lifts, sash lock or latch and sash pulls.

e. Environmental Control Windows

- (1) These are special aluminum windows which have a thermal- break in the frame and are double glazed with a slat-type venetian blind between the glass panes.
- (2) Check thermal-break for ½-inch minimum separation. Barrier at break shall be weatherproof neoprene, rigid vinyl or polyurethane.
 - (3) Unit shall arrive fully assembled and glazed.
- $\left(4\right)$ $\,$ Check normal operation and key controlled operations required.
 - (5) Check required finish. 8C-03 INSTALLATION
- a. Anchors as specified shall be of compatible material for $\!\!\!$ metal windows.
- b. Protect aluminum window surfaces in contact with dissimilar materials as required in AAMA 302.9 provisions.
 - c. Check for unit alignment and plumbness.
 - d. Check operation and require adjustments as necessary.
- e. Check for removal of temporary protective coating from aluminum on surfaces to receive sealant.
- f. Check for required performance certification labels (wood windows) and quality certification labels (aluminum windows)
 - g. Window cleaning anchors may be required. Watch for:
 - (1) Specified anchor material.
- $\ensuremath{\text{(2)}}$ Frame reinforcement at anchors and additional window anchorage.
 - (3) Check requirement in ANSI A39.1.
 - h. Check AAMA 1302.5 for forced-entry resistant windows.